Updated: 29dec05

Things to Know about Ethanol and Biodiesel Quality

Rising crude oil prices, increasing oil consumption, and concerns about national security and the environment are raising interest and demand for renewable fuels made from domestic resources. Fuels blended with ethanol and biodiesel have proven to be highly compatible with today's motor vehicles provided the blended products are produced in accordance with prescribed industry standards.

<u>ASTM International</u> is known world-wide as an authority for the development of technical standards for materials, products, systems, and services. Standards are important because they create consistency between different manufacturers. They specify the properties that can be expected of a product and how those properties are to be measured. In the case of motor fuels, standards ensure a certain level of fuel quality that allows engine manufactures to build high performance engines that minimize harmful emissions.

The U.S. Government and industry organizations recognize ASTM standards for ethanol, blended ethanol, and biodiesel. The standard specification for denatured fuel ethanol for blending with gasoline is <u>ASTM D4806</u>, whereas the properties of an E-85 fuel blend are described by <u>ASTM D5798</u>. The standard specification for B100 blend stock for distillate fuels (also known as "pure" or "neat" biodiesel) is <u>ASTM D6751</u>.

In Kentucky, motor fuels inspection and testing is administered by the <u>Kentucky Department of Agriculture</u>, <u>Division of Regulation and Inspection</u>. The Commonwealth's regulations specify that ASTM standards, supplements, and revisions shall be applied to ensure compliance with <u>Kentucky Statutes</u>. The Division tests motor fuels to ensure that the quality of the fuel meets Kentucky law and ASTM standards.

For more information about ethanol and biodiesel specifications for delivery, storage or blending, contact:

U.S. Department of Energy Kentucky Office of Energy Policy Kentucky Clean Fuels Coalition Renewable Fuels Association National Biodiesel Board

www.eere.energy.gov/afdc/ www.energy.ky.gov

www.kentuckycleanfuels.org

www.ethanolrfa.org www.biodiesel.org

Related Documents

<u>Fuel Ethanol: Industry Guidelines, Specifications, and Procedures</u>, Renewable Fuels Association <u>Handbook for Handling, Storing, and Dispensing E85</u>, U.S. Department of Energy <u>2004 Biodiesel Handling and Use Guidelines</u>, U.S. Department of Energy <u>Technical Statement on the Use of Biodiesel Fuel in Compression Ignition Engines</u>, Engine Manufacturers Association